

Title (en)

System for recognizing and terminating pacemaker-mediated tachycardia.

Title (de)

System zur Erkennung und Beendigung von durch einen Herzschrittmacher induzierten Tachykardien.

Title (fr)

Système pour détecter et faire cesser une tachycardie induite par un stimulateur cardiaque.

Publication

EP 0477878 A2 19920401 (EN)

Application

EP 91116269 A 19910924

Priority

US 58822690 A 19900926

Abstract (en)

A pacemaker mediated tachycardia (PMT) is detected by circuitry (166, 170, 174, 176, 178, 180, 182, 184, within an implantable pacemaker (160). The PMT is detected by first detecting a tachycardia condition that includes a prescribed number of consecutive cardiac cycles having a rate faster than a prescribed rate. Each cardiac cycle of the tachycardia condition includes a natural atrial event, i.e., a P-wave, and a paced ventricular event, i.e., a V-pulse generated by a pacemaker. After the prescribed number of such cardiac cycles, e.g., two to ten, a P-V delay in a single cardiac cycle is modified by a first prescribed amount, e.g., 50 milliseconds. The time interval of a V-P interval associated with at least one cardiac cycle preceding the modified P-V delay is then compared to a V-P interval immediately following the modified P-V delay. Only if the difference between the V-P intervals thus measured is less than a second prescribed amount, e.g., 25 milliseconds, is a PMT indicated. If a PMT is indicated, a PMT termination regimen, e.g., extending PVARP, is automatically invoked by the pacemaker (160) for a prescribed number of cardiac cycles, such as one or two cardiac cycles. <IMAGE>

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